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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 1

of 12

Application Number 10/773,777  
Filing Date Feb. 6, 2004  
First Named Inventor Anand P. Narayan  
Art Unit  
Examiner Name  
Attorney Docket Number TCOM-0006

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2,3,4,5,6</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/E.B./ ↓		US- 4088955	05-09-1978	Baghdady	
		US- 4309769	01-05-1982	Taylor, Jr.	
		US- 4359738	11-16-1982	Lewis	
		US- 4665401	05-12-1987	Garrard et al.	
		US- 4670885	06-02-1987	Parl et al.	
		US- 4780885	10-25-1988	Paul et al.	
		US- 4856025	10-08-1989	Takai	
		US- 4893316	01-09-1990	Janc et al.	
		US- 4922506	05-01-1990	McCallister et al.	
		US- 4933639	06-12-1990	Barker	
		US- 4965732	10-23-1990	Roy III et al.	
		US- 5017929	05-21-1991	Tsuda	
		US- 5099493	05-24-1992	Zeger et al.	
		US- 5105435	04-14-1992	Stilwell	
		US- 5109390	04-28-1992	Gilhausen et al.	
		US- 5119401	06-02-1992	Tsujimoto	
		US- 5136296	04-04-1992	Roettger et al.	
		US- 5151919	09-29-1992	Dent	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>2</sup> and Patent Number <sup>3</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/E.B./		EP 0556910 A1	01-25-1993	Blaunkunt-Werke GmbH	
/E.B./		EP 0610989 A2	01-31-1994	Phillips Patentverwaltung GmbH	
/E.B./		JP2000-13360A	01-14-2000	NEC Corp.	
/E.B./		DE 4201439 A1	07-22-1993	Daimler-Benz	
/E.B./		DE 4326843 A1	02-16-1995	Richard Hirschmann GmbH & Co	

Examiner Signature /Emmanuel Bayard/ Date Considered 11/19/2007

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E.B./  ↓  F.B./		US- 5440265	08-08-1995	Cochran et al.	
		US- 5448600	09-05-1995	Lucas	
		US- 5481570	01-02-1996	Winters	
		US- 5506865	04-09-1996	Weaver Jr.	
		US- 5513176	04-30-1996	Dean et al.	
		US- 5533011	04-02-1996	Dean et al.	
		US- 5553098	09-03-1996	Cochran et al.	
		US- 5602833	02-11-1997	Zehavi	
		US- 5644592	07-01-1997	Divsalar	
		US- 5736964	04-07-1998	Ghosh et al.	
		US- 5787130	07-28-1998	Kotzin et al.	
		US- 5844521	12-01-1998	Stephens et al.	
		US- 5859613	01-12-1999	Otto	
		US- 5872540	02-16-1999	Casabona	
		US- 5872776	02-16-1999	Yang	
		US- 5926761	07-20-1999	Reed et al.	
	US- 5930229	07-27-1999	Yoshida et al.		
	US- 5953369	09-14-1999	Suzuki		

## FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Claims Appear	Page No.
		U.S. Pat. No. 1,000,000				PAGE 1
						PAGE 2
						PAGE 3
						PAGE 4
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						PAGE 6
						PAGE 7
						PAGE 8
						PAGE 9
						PAGE 10

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 Attorney Docket Number TCOM-0006

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Examiner Initials*	Cite No.	Document Number Number-Kind Code <sup>2</sup> (Accession)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/E.B./ ↓ /E.B./		US- 5995499	11-30-1999	Hottinen et al.	
		US- 6002727	12-14-1999	Uesugi	
		US- 6014373	01-11-2000	Schilling et al.	
		US- 6018317	01-25-2000	Dogan et al.	
		US- 6088383	07-11-2000	Suzuki et al.	
		US- 6101385	08-08-2000	Monte et al.	
		US- 6104712	08-15-2000	Robert et al.	
		US- 6115409	09-05-2000	Upadhyay et al.	
		US- 6127973	10-03-2000	Choi et al.	
		US- 6131013	10-10-2000	Bergstrom et al.	
		US- 6137788	10-24-2000	Sawahashi et al.	
		US- 6141332	10-31-2000	Lavaen	
		US- 6154443	11-28-2000	Huang et al.	
		US- 6157685	12-05-2000	Tanaka et al.	
		US- 6157842	12-05-2000	Kaisson et al.	
		US- 6157847	12-05-2000	Buehrer et al.	
		US- 6163696	12-19-2000	Bi et al.	
		US- 6166690	12-26-2000	Lin et al.	

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 5

of 12

Attorney Docket Number

TCOM-0006

**Complete if Known**

Application Number

10/773,777

Filing Date

**Feb. 6, 2004**

**First Named Inventor**

Anand P. Narayan

Art Unit
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Examiner Name	
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Attorney Docket Number

TCOM-0006

## U. S. PATENT DOCUMENTS

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/E.B./		US-6172969	01-09-2001	Kawakami et al.	
		US-6175587	01-15-2001	Madhow et al.	
		US-6192067	02-20-2001	Toda et al.	
		US-6201799	03-13-2001	Huang et al.	
		US-6215812	04-10-2001	Young et al.	
		US-6219376	04-17-2001	Zhodzishsky et al.	
		US-6222828	04-24-2001	Ohlson et al.	
		US-6230180	05-08-2001	Mohamed	
		US-6233229	05-15-2001	Ranta et al.	
		US-6233459	05-15-2001	Sullivan et al.	
		US-6240124	05-29-2001	Wiedeman et al.	
		US-6252535	06-26-2001	Kober et al.	
		US-6256336	07-03-2001	Rademacher et al.	
		US-6259688	07-10-2001	Schilling et al.	
		US-6263208	07-17-2001	Chang et al.	
		US-6275186	08-14-2001	Kong	
		US-6278726	08-21-2001	Mesecher et al.	
/E.B./		US-6282231	08-21-2001	Norman et al.	

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Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Prior Art	T <sup>6</sup>
		Country, State or Other Country, if any				

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 6

of 12

**Complete if Known**

Application Number 10/773,777

Filing Date Feb. 6, 2004

First Named Inventor **Anand P. Narayan**

## Art Unit

Examiner Name \_\_\_\_\_

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/E.B./  ↓  /E.B./		Number-Kind Code <sup>2</sup> (Apparatus)			
		US-6282233	08-28-2001	Yoshida	
		US-6285316	09-04-2001	Nir et al.	
		US-6285319	09-04-2001	Rose	
		US-6301289	10-09-2001	Bejjani et al.	
		US-6304618	10-16-2001	Hafeez et al.	
		US-6308072	10-23-2001	Labeledz et al.	
		US-6310704	10-30-2001	Dogan et al.	
		US-6317453	11-13-2001	Chang	
		US-6321090	11-20-2001	Soliman	
		US-6324159	11-27-2001	Mennekens et al.	
		US-6327471	12-04-2001	Song	
		US-6330460	12-11-2001	Wong et al.	
		US-6333947	12-25-2005	van Heeswyk et al.	
		US-6351235	02-26-2002	Stilp	
		US-6351642	02-26-2002	Corbett et al.	
	US-6359874	03-19-2002	Dent		
	US-6362760	03-26-2002	Kober et al.		
	US-6377636	04-23-2002	Paulraj et al.		

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E.B.  ↓  E.B.		US- 6380879	04-30-2002	Kober et al.	
		US- 6396804	05-28-2002	Odenwalder	
		US- 6430216	08-06-2002	Kober et al.	
		US- 6459693	10-01-2002	Park et al.	
		US- 20010003443	06-14-2001	Velazquez et al.	
		US- 20010020912	09-13-2001	Naruse et al.	
		US- 20010021646	09-13-2001	Antonucci et al.	
		US- 20010046266	11-29-2001	Rakib et al.	
		US- 20020001299	01-23-2002	Petch et al.	
		US- 20020172173	11-21-2002	Schilling et al.	
		US- 20030053526	03-20-2003	Reznik	
		US- 6285861	09-04-2001	Bonaccorso et al.	
		US- 3742201	06-26-1973	Groginsky	
		US- 4713794	12-15-1987	Byington et al.	
		US- 5377183	12-27-1994	Dent	
	US- 20020051433	05-02-2002	Affes et al.		
	US- 5894500	04-13-1999	Bruckert et al.		
	US- 6404760	06-11-2002	Holtzman et al.		

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		US-6584115	06-24-2003	Suzuki	
		US-6266529	07-24-2001	Chheda	
		US-5978413	11-02-1999	Bender	
		US-6590888	07-08-2003	Ohshima	
		US-20020176488	11-28-2002	Kober et al.	
		US-6032056	02-29-2000	Reudink	
		US-4601046	07-15-1986	Halpern	
		US-6515980	02-04-2003	Bottomley	
		US-6574,270	06-03-2003	Madkour	
		US-6798737	09-28-2004	Dabak	
		US-6501788	12-31-2002	Wang	
		US-6801565	10-05-2004	Bottomley	
		US-6404760	06-11-2002	Holtzman	
		US-6385264	05-07-2002	Terasawa	
		US-6680727	01-20-2004	Butler	
	US-6570909	05-27-2003	Kansakoski		
	US-6580771	06-17-2003	Kenney		
/E.B./		US-6363104	03-26-2002	Bottomley	

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 10 of 12

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Application Number 10/773,777

Filing Date Feb. 6, 2004

First Named Inventor Anand P. Narayan

Art Unit

Examiner Name

Attorney Docket Number TCOM-0006

### NON PATENT LITERATURE DOCUMENTS

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/E.B./		VERDU, Minimum Probability of Error for Asynchronous Gaussian Multiple-Access Channels, IEEE Transactions on Information Theory, Jan. 1986, Vol. IT-32, No. 1	

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Application Number **10/773,777**  
 Filing Date **Feb. 6, 2004**  
 First Named Inventor **Anand P. Narayan**  
 Art Unit \_\_\_\_\_  
 Examiner Name \_\_\_\_\_  
 Attorney Docket Number **TCOM-0006**

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↓		SCHARF, Statistical Signal Processing - Detection, Estimation, and Time Series Analysis, 1990, pgs. 23-75 and 103-178, Addison-Wesley, Reading, MA, US	12
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/E.B./		SCHLEGEL ET AL., Projection Receiver: A New Efficient Multi-User Detector, IEEE, 1995, 0-7803-2509-5/95	12
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